

Figure 1

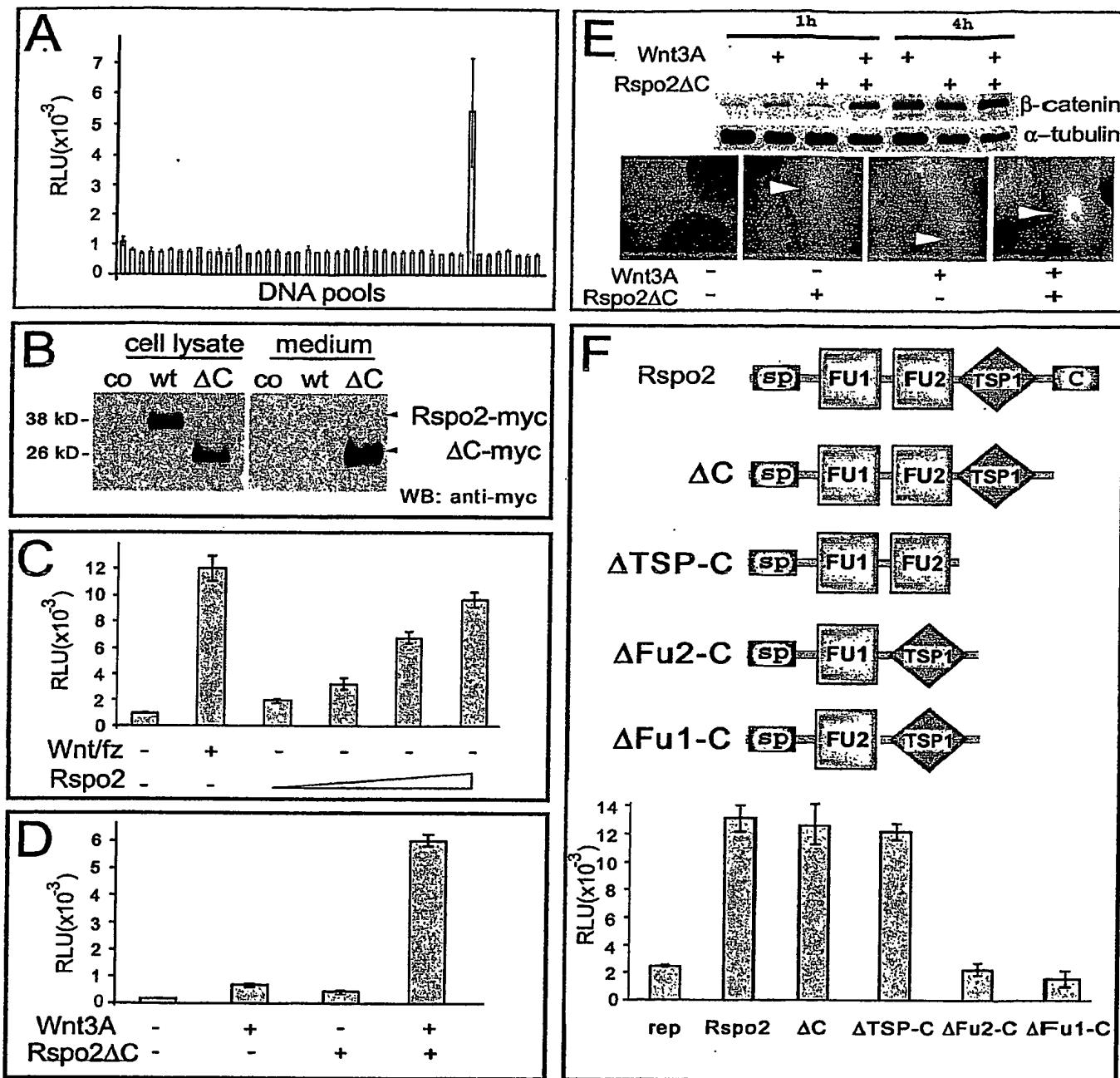


Figure 2

Figure 3

hFut1	1	MQERLFSFALILNCEEDYSQO.	GNRWRERSKRASVVSNPICKG.	CESCSKEDNGCISRCCOQ.
hFut2	1	MEHLRLISWLFILINFEETI	GSQASRGRORRMEHPNVSQECOGGCATCS	SYNGCILSKCP
hFut3	1	MRLGLCVVALI	TSWTHLSSR.GTIGGERORRSEAEGSQA	CAKGCELJCSEVNGCILKCS
hFut4	1	MRAPLCLLVAH	AVDMALNR.....BRKQVCTGNGNCTG.	CAICSEENGCCSTCQK
hFut1	59	LEFFERREGKROYGECLHSCPSGY	TYGERAPBDMNRCAR.CBIENC
hFut2	61	LEFFALERIGWQFGVCLSSCP	SGYGYTRYPDINRCK.CKAD.C
hFut3	60	LEFILERENDTRQV	VGVCLPSCPGYDARNEDMNKINS	SAVPAALGQGPALHECK
hFut4	54	LEFFERREGKROYG	ACLHDCPPGYFEGIREQEMYNRCKK.CGAT.C
hFut1	102	ESCFSKDFFCTKCKVGFYLH	GRSFDECPEGFAPPLEETMECVEG.	CEVGHEWSEWNGCTCERN
hFut2	103	TCFVKMFCTKCKVGFYLH	GCIDNCPEGLEANNHTMECVSIVH	CEVYSEWNPWSPC
hFut3	120	ACFSNFFCTKCKVGFYLH	GRCPYACPEGSIAANGTMEC	SSPAQCEWSPWGPC
hFut4	96	ESCFSQDFFCTKCKVGFYLH	GRCPYACPEGSIAANGTMEC	SSPAQCEWSPWGPC
hFut1	160	NETCGFKWGLETTRQI	WKKPVKDTIPCPDTIPTIAFESRECK	YKTMRECPGCKRE.
hFut2	163	GKTCGPKRGTETR	WREIHOHPSAKGNCPPTN	PKKMEKRR
hFut3	180	QOLCGPFRGSEER	TRRWHAPVGDAA	KKGRERK
hFut4	154	GKTCGSAWGLER	TRRWHAPVGDAA	ACSDTRKFRFCTVBRVPCPEGKAR.
hFut1	217	NKK.	KKLIERAQEGHSVETATDRANO.EKGEGYGR
hFut2	220	RKKPNKGESESKEAF	PSKESSEKEPEORENKQQQK	QKSVSYSTVH
hFut3	237	REN	ANRNLAKESEAGAGS.	RRRKQQQQQQGTTGPLTSAGPA
hFut4	212	RPKKDRKLDRLD

Figure 4

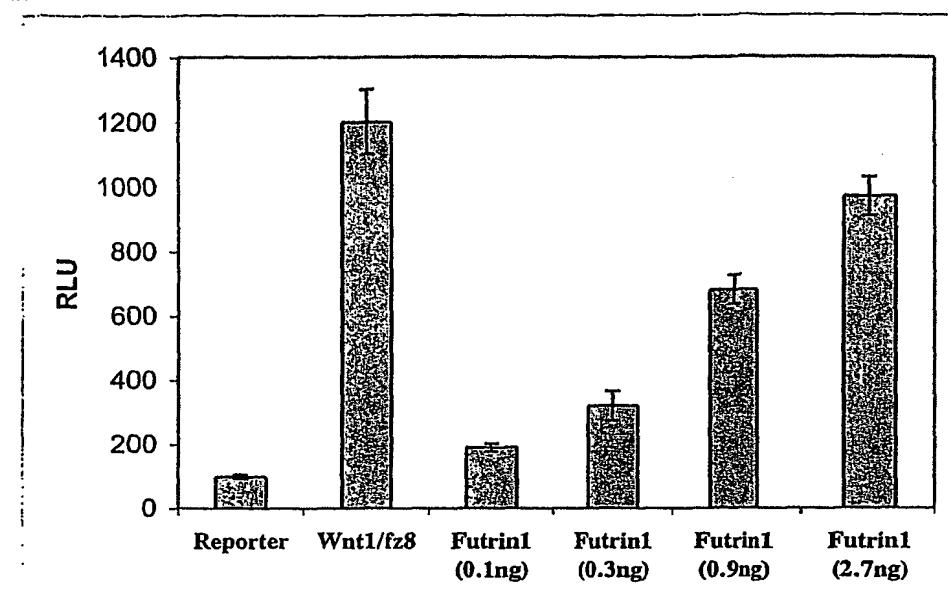
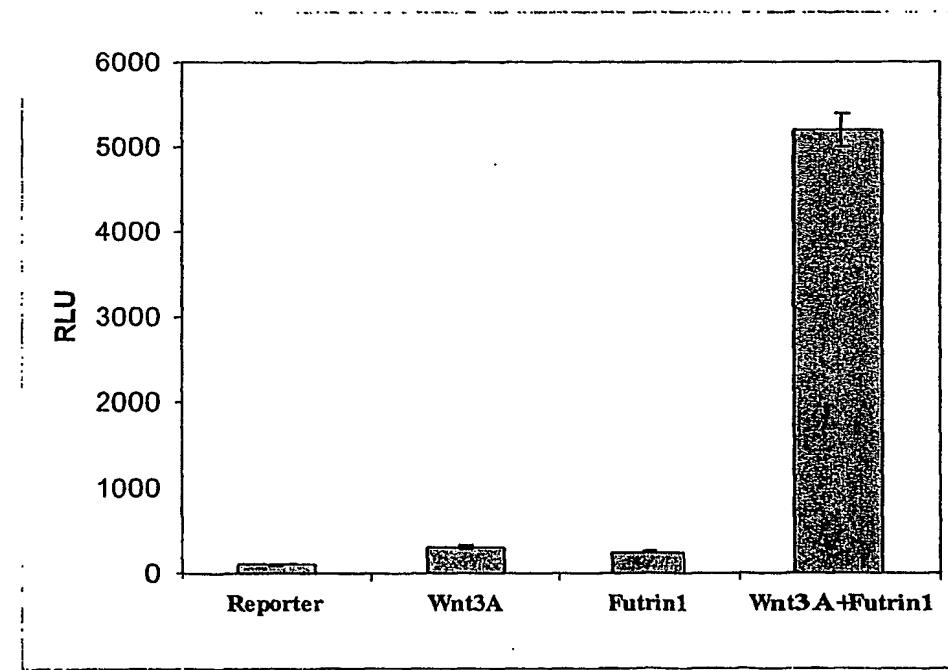
A**B**

Figure 5

A

hR-spondin1	1	MRI GLCVVAVL VLSWTHLTISGR . GIKGKRQPRPESAGSQACAKGCELCS EVNGCLKCSPK
hR-spondin2	1	MQFRLFSFALTILNCMDVSECQ . GNEWRRSKRASYVSNPICKG . CLSCSKDNGC SRCQK
hR-spondin3	1	MHLRLISWLFITLNFMEVIGSQNASRGRQRPMEPNVSQGCOGGCATCSQYNGCLSLCKPR
hR-spondin4	1	MRAPLCLLIVAKAVDMLALNR RKKQVGTGIGGNGTS . CTCICSEERNGC STCQQR
signal peptide		
furin-like domain 1		
hR-spondin1	60	LEIILLERNDERQGVCLPSCPFGYFDARNPDMNKCI . CKIEHCEACFSHN FCTKCKEGLY
hR-spondin2	59	LFFFLLRREGMRQVGECLHSCPSGYVGHRAPDMNRCA RCRRIENCDSCFSKDFCTKCKVGFY
hR-spondin3	61	LFFAALERIGMKQIGVCLSSCPGSGYVGTTRYPDINKCTKCKAD . CDTCFNKNFCTKCKSGFY
hR-spondin4	54	LFLFIRREGIRQVYKCLHDCPPGYFGIRGQEVNRCCKKGAT . CESCFSDFCIRCKRQFY
furin-like domain 2		
hR-spondin1	119	LHKGRCPYACPPEGSSAANGTMECSSPAOCEMSEWSPWGPCKSKKQOLCGFRRGSEERTRRV
hR-spondin2	119	LHNGRSFDECPDGFAPLEETMECVEG . . . CEVGHWSWGTCSRNNNTCGFRKGLETRTRQI
hR-spondin3	120	LHLLGKCLDNCP EGLEANNHETMECVSIVHCEVSEWNPWSPCTKKGKTCGFKRGTETRVREI
hR-spondin4	113	LYKGKCLPTCPPGTLAHQNTRECQG . . . CELGPWCGWSPCINGKTCGSAWGLESRVREA
thrombospondin type 1 domain		
hR-spondin1	180	EEAPVGDHAACSDTKE TRECTVRRVPCPEGQKR . . . RKGGCGREEN . . . ANRNLAKE
hR-spondin2	160	VKKPVVKDTIPCPETLAESRRCKATMREHCPGGKRT . . . PKAKEERNKK . . . KRKLIERA
hR-spondin3	163	EQHPSAXGNLCPPNETRKCTVQRKKCOKGERG . . . KKGRERKRKKPNKGESKEATPDSK
hR-spondin4	154	GRAGHHEAATCQVLSERSRKCPDQR . PCP . GERSPGOKKGRKDRPPR . . . KDRKIDRRL

hR-spondin1	231	SK EAGAGSSRRRKGGQQQQQQGTVGPLTSAGPA-----
hR-spondin2	229	QEGHGSVFMATDNNQ-----
hR-spondin3	237	SLESSKETPEORENKQQQKKRKVQDKQKSVSVSTVH
hR-spondin4	224	D-----

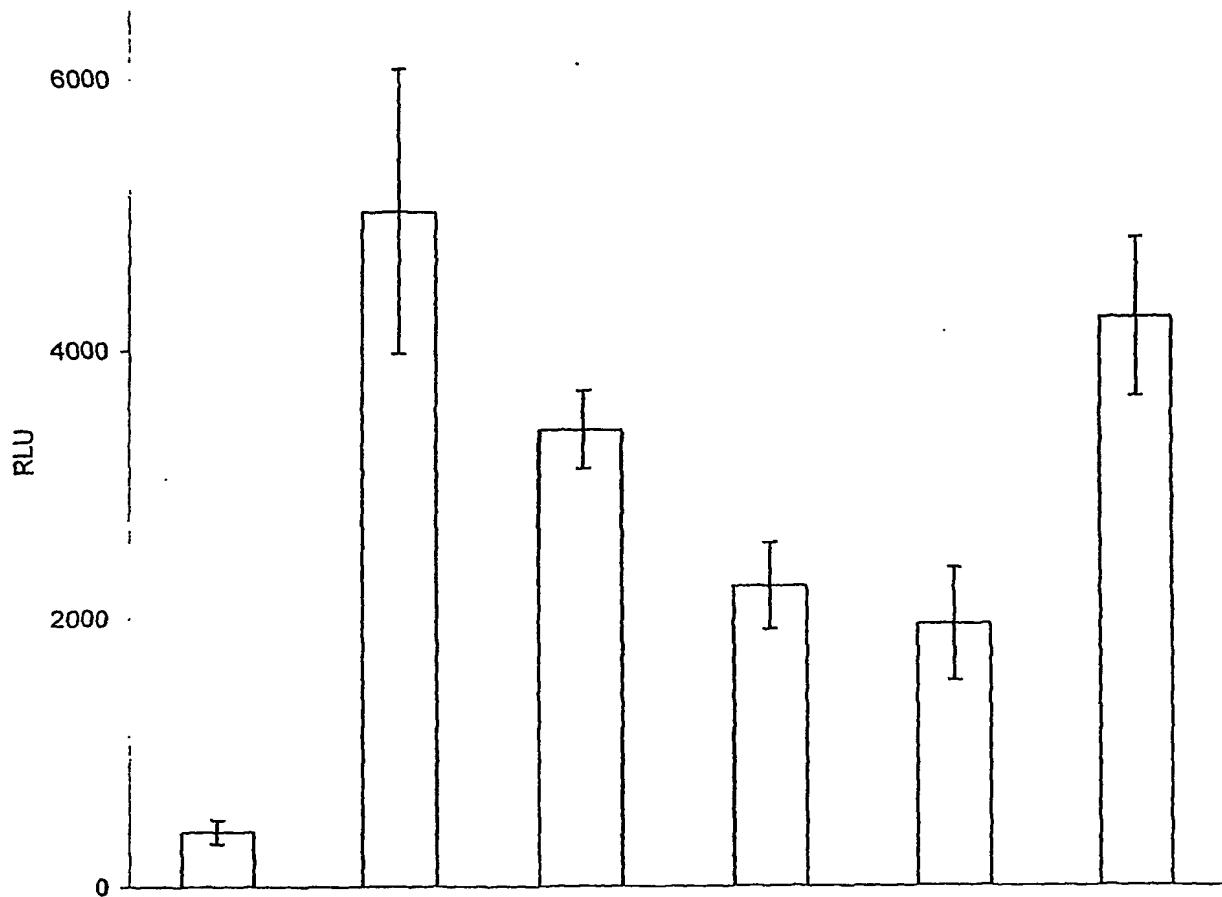
B

hRspo2	39.9			
hRspo3	43.7	45.9		
hRspo4	40.3	43.9	41.2	
	hRspo1	hRspo2	hRspo3	

C

mRspo2	40.5	95.5	44.2	44.8
XRspo2	40.8	83.5	43.8	42.2
	hRspo1	hRspo2	hRspo3	hRspo4

Figure 6



pSuper Non.	+	+			
pSuper hFut1		+	+	+	
pSuper hFut2			+	+	+
Wnt3A med.	-	+	+	+	+
mFut1					+

Figure 7

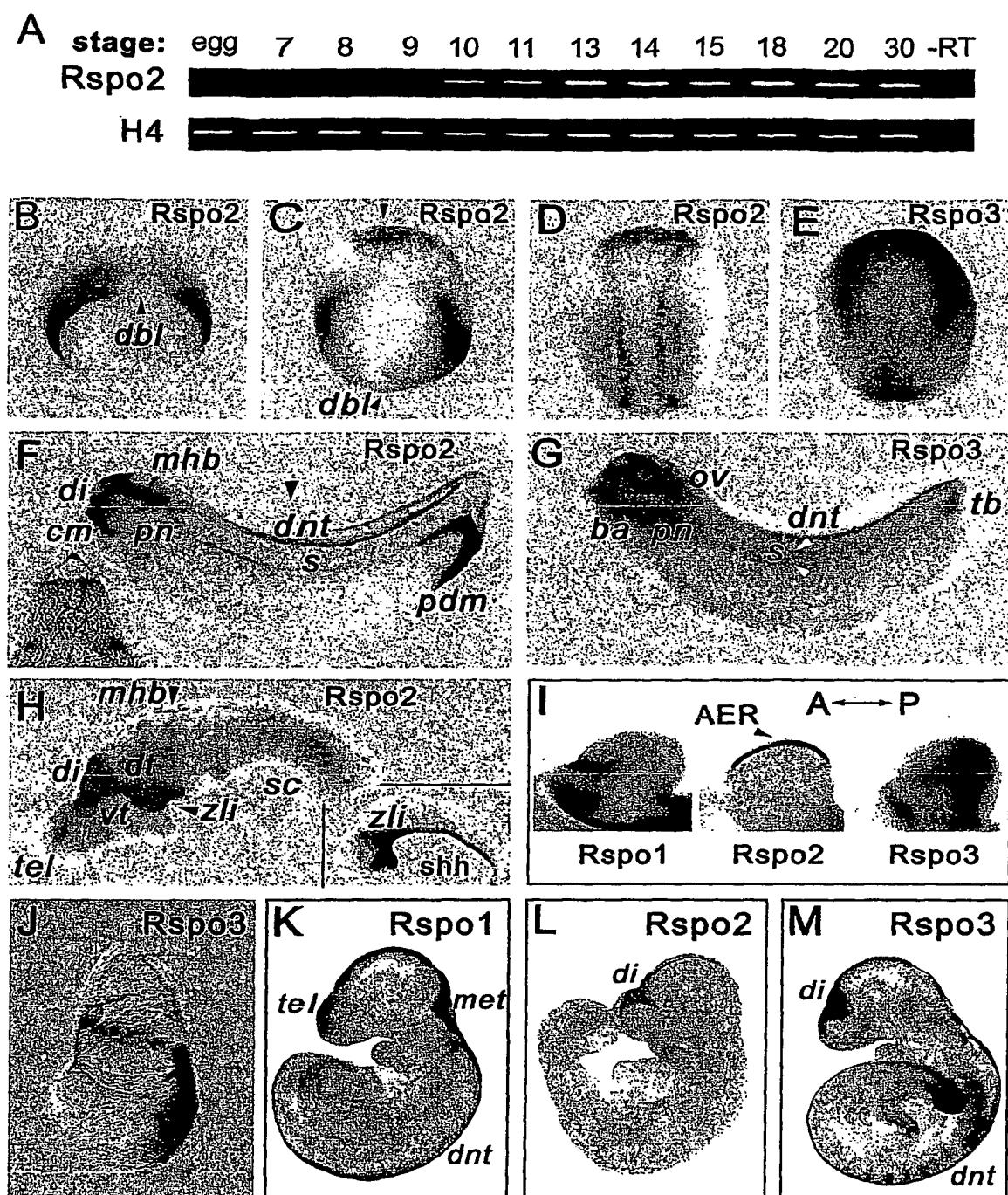


Figure 8

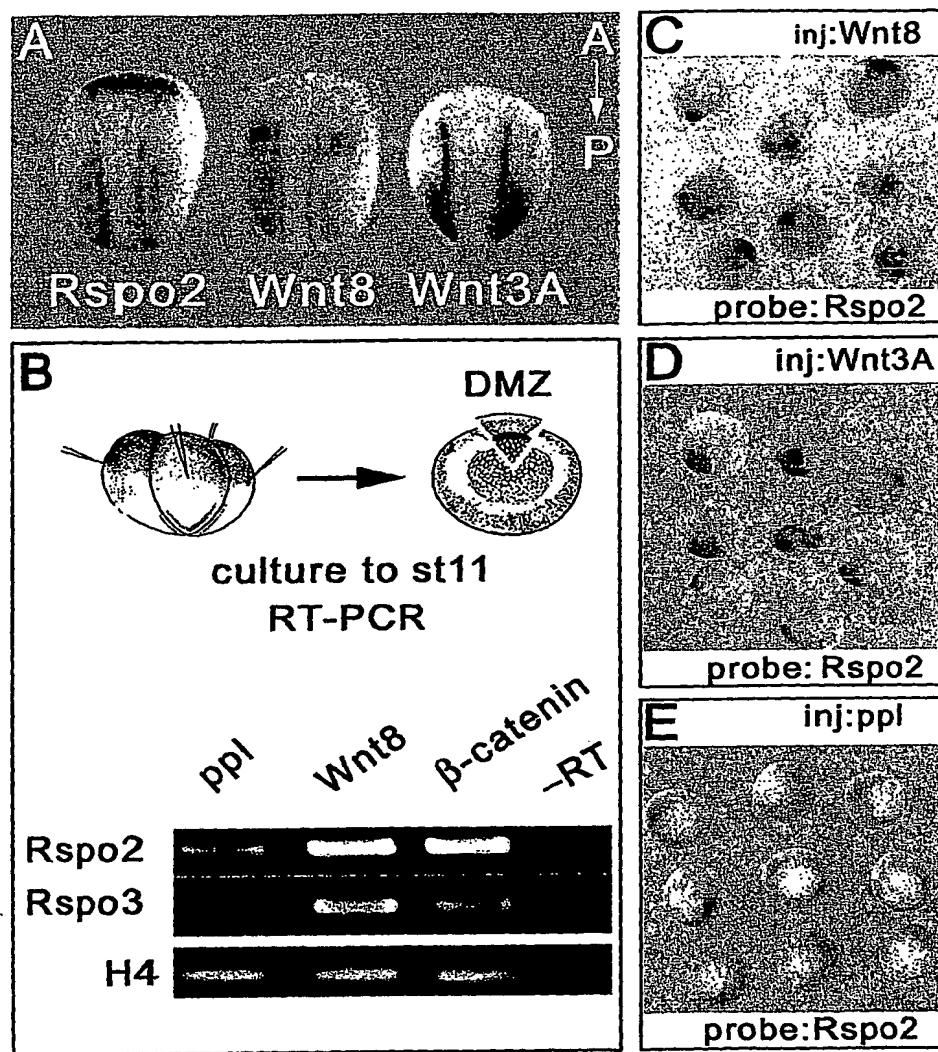


Figure 9

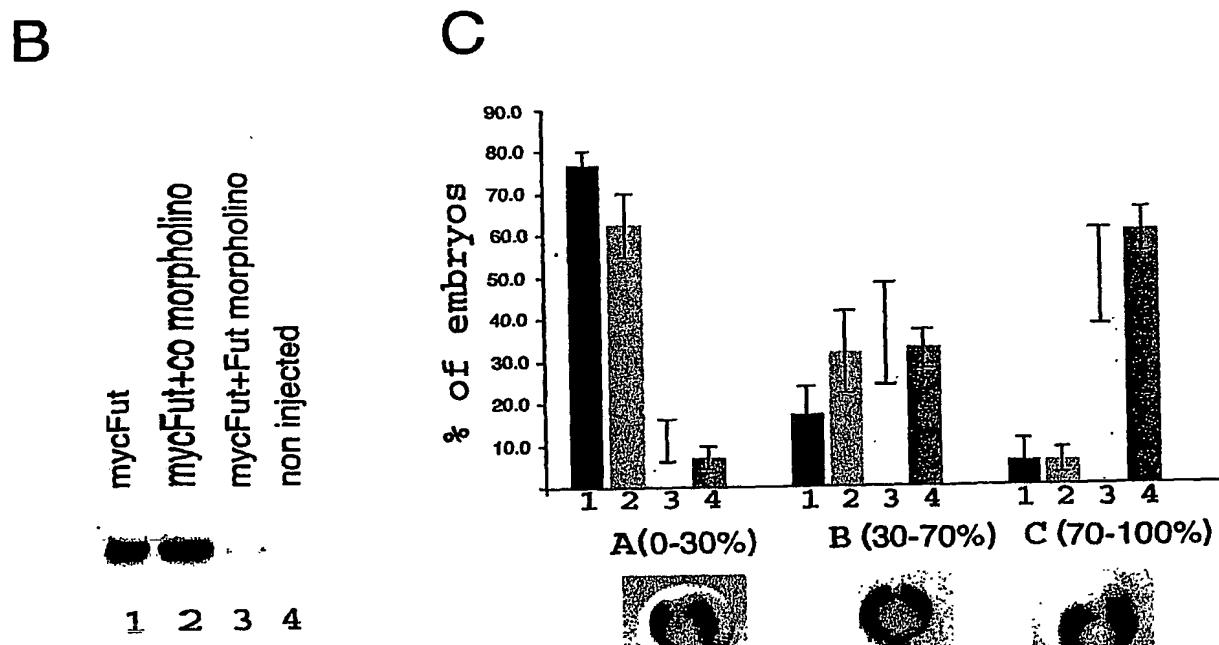
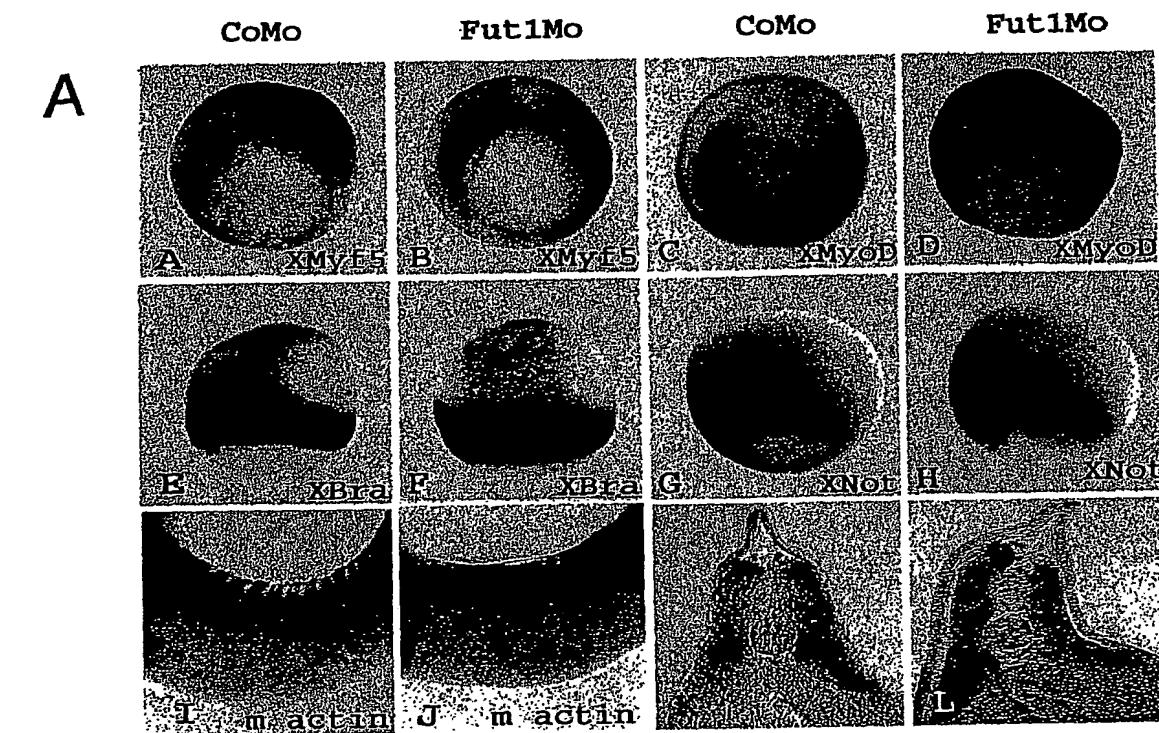


Figure 10

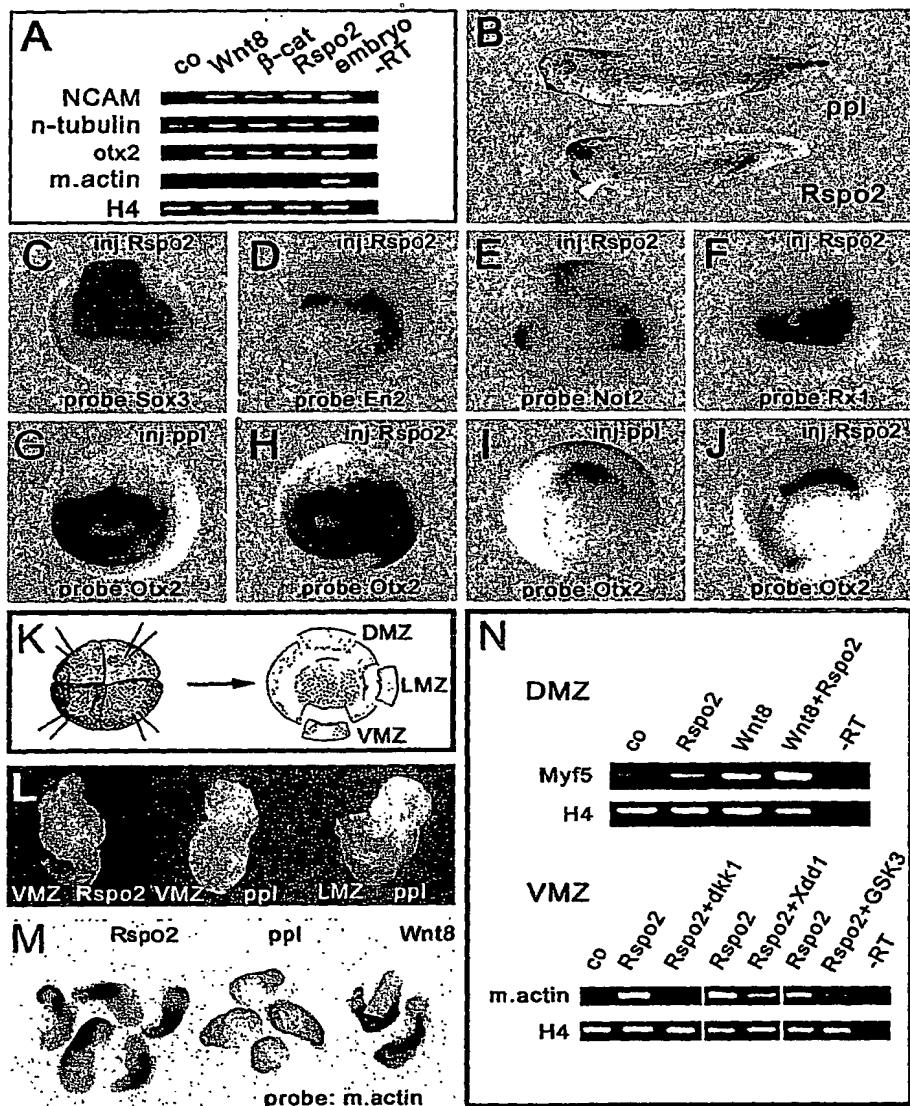


Figure 11

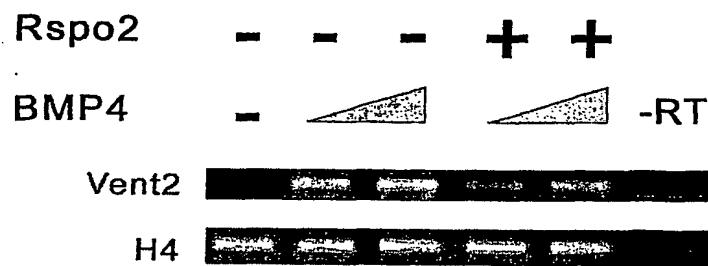
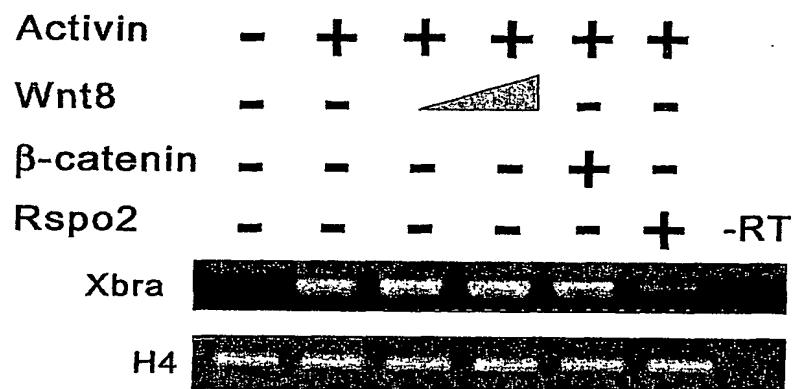
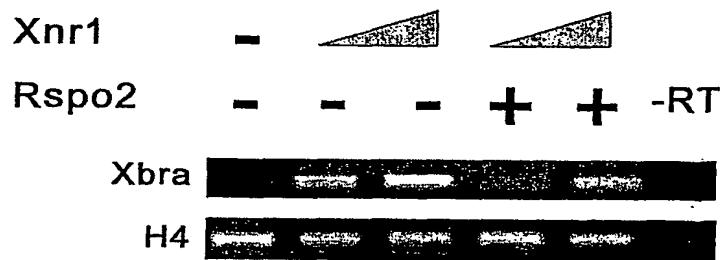
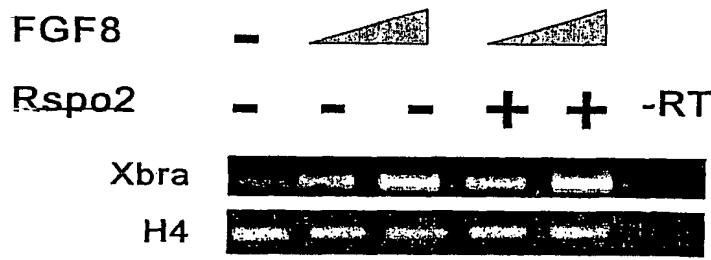
A**B****C****D**

Figure 12

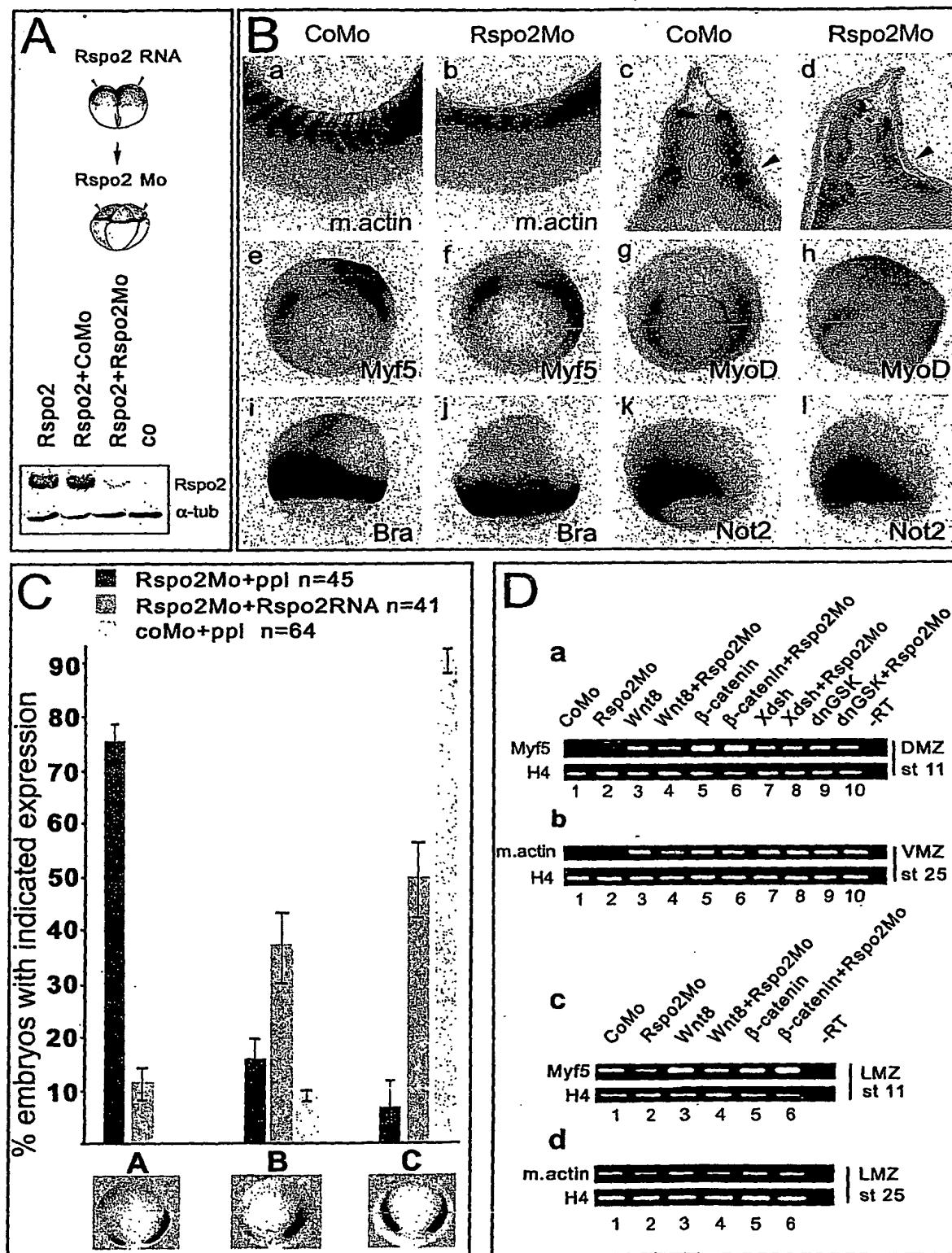


Figure 13

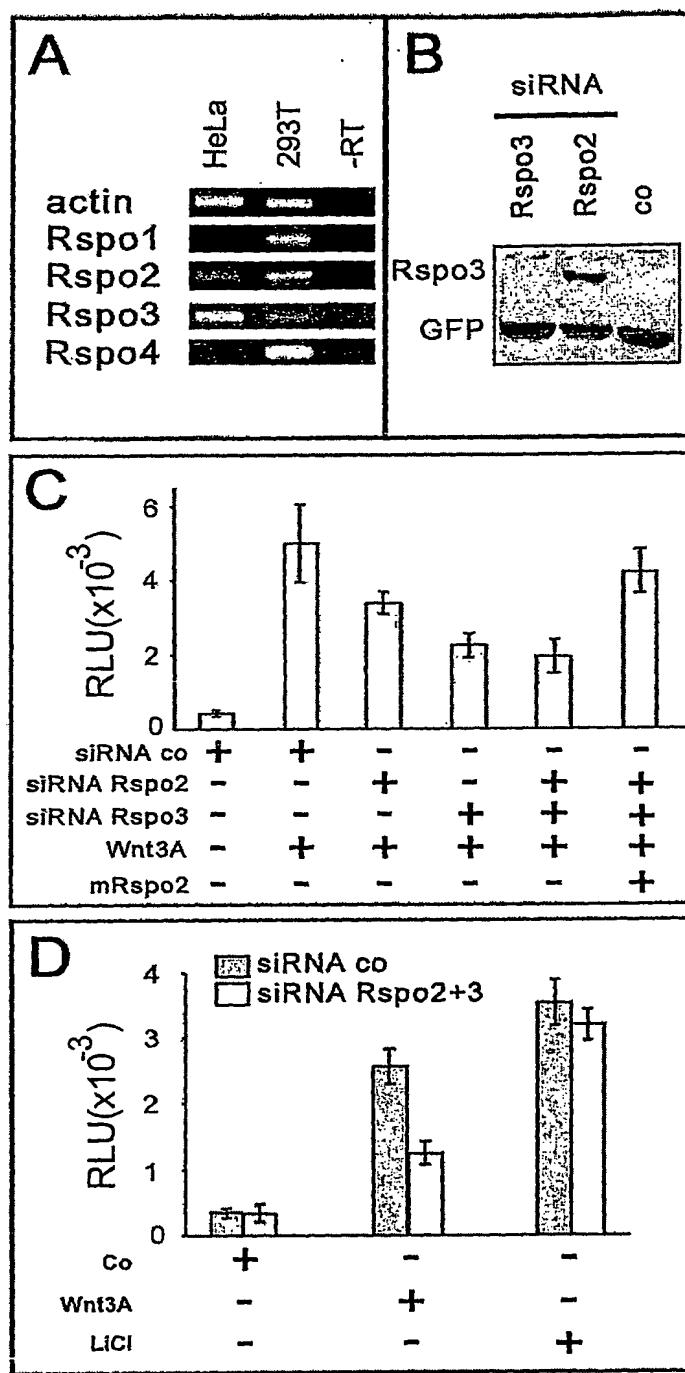
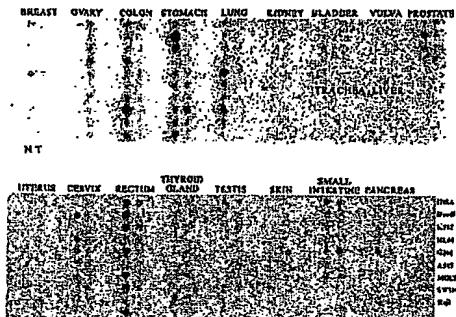
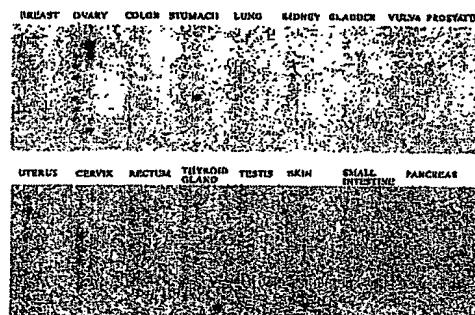


Figure 14

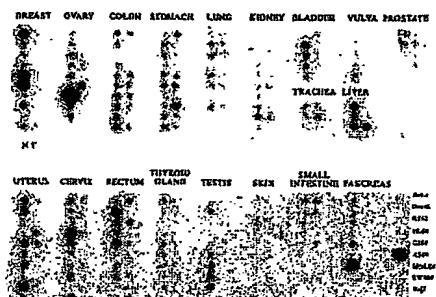
hFutrin1



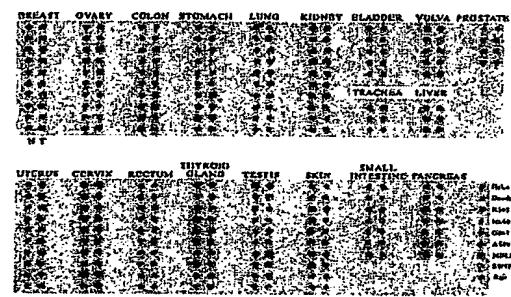
hFutrin3



hFutrin2



Ubiquitin



hFutrin4



Figure 15

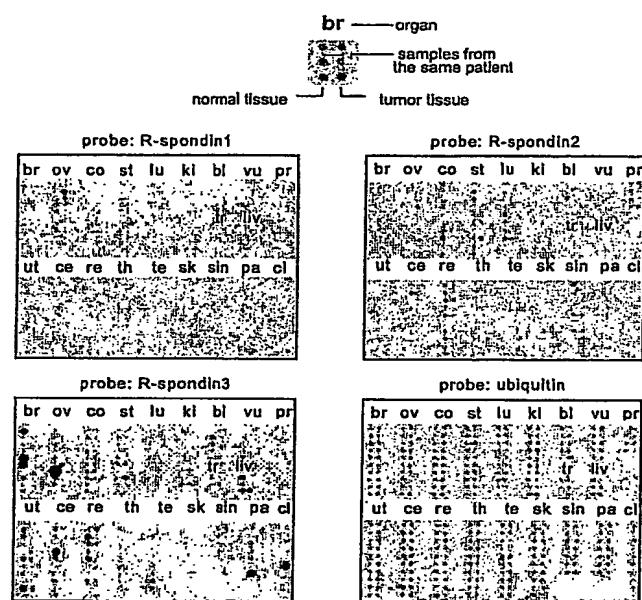


Figure 16

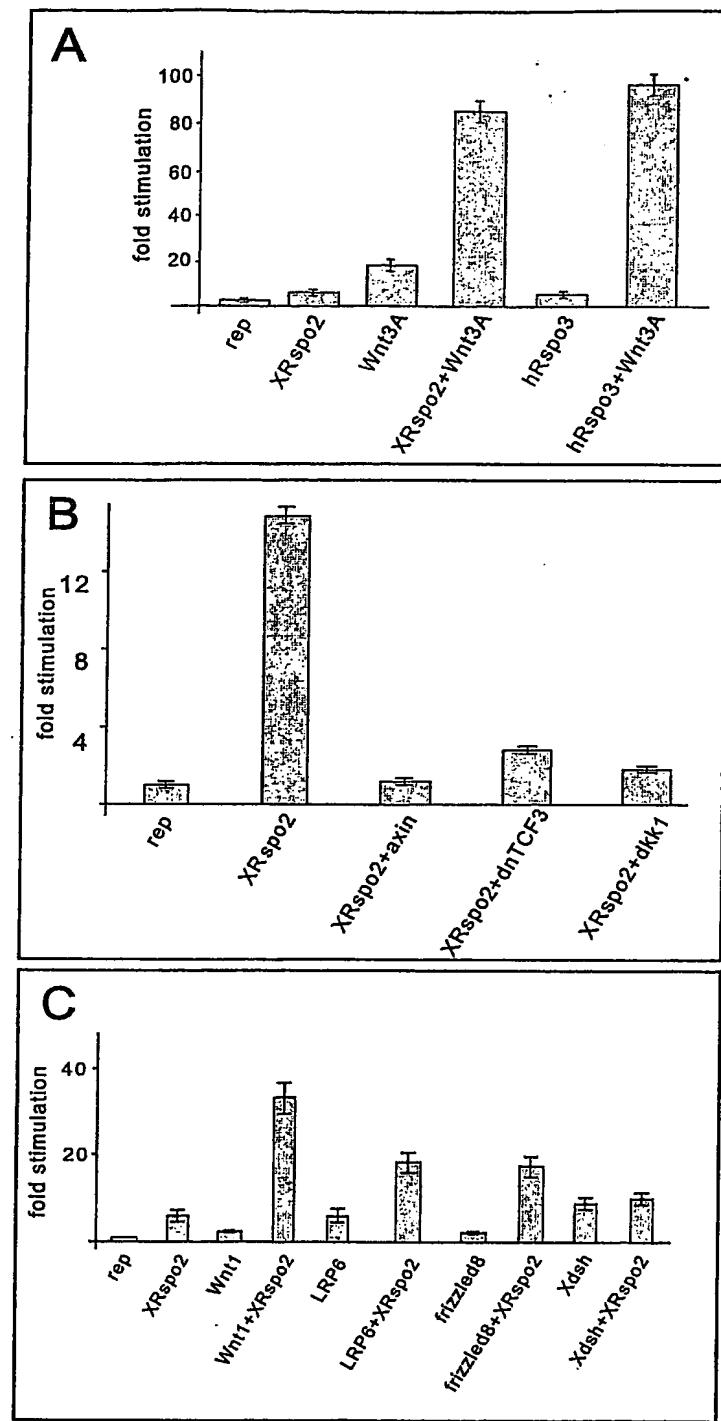


Figure 17